

REMARKS

Applicants submit the present *Response* to address the issues raised in the Office Action mailed May 7, 2007. The Office Action states that Claims 1-24 stand rejected as anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 6,380,937 to Dong et al. ("Dong"). Applicants respectfully request reconsideration of these rejections for the following reasons.

I. The Rejection of Claim 1

Independent Claim 1 recites:

1. A method for displaying a set of hierarchical data on an electronic display, the method comprising:

displaying the set of hierarchical data on the electronic display in a tree diagram having a first portion and a second portion;

wherein the first portion of the tree diagram has a plurality of vertically oriented levels; and

wherein the second portion of the tree diagram has a plurality of horizontally oriented levels.

In rejecting Claim 1, the Office Action cites to Col. 2, lines 28-43, Col. 3, lines 53-60 and Col. 4, lines 8-22 of Dong as allegedly disclosing a tree diagram having a first portion with a plurality of vertically oriented levels and a second portion with a plurality of horizontally oriented levels. (Office Action at 2). Applicants respectfully traverses this rejection.

As discussed at page 9, lines 12-21 of the present application, a "vertically oriented level" of a tree diagram refers to a vertically oriented group of nodes that are physically offset from other vertically oriented levels in the tree diagram, where each node contains hierarchical data. Likewise, a "horizontally oriented level" of a tree diagram refers to a horizontally oriented group of nodes that are physically offset from other horizontally oriented levels in the tree diagram, where each node contains hierarchical data. While Figs. 3-5 of Dong do disclose "hierarchical trees", these diagrams do not include either a plurality of vertically oriented levels or a plurality of horizontally oriented levels. Instead, **all of the hierarchical data** is displayed in a single vertically oriented level (i.e., the vertical column that contains the text labels such as "Models", "UCD Features", etc.), and hence there are not **a plurality** of vertically oriented levels. Dong likewise does not disclose a **plurality** of horizontally oriented levels, as Dong does not provide

more than one item of hierarchical data in any horizontal row in Figs. 3-5. While Figs. 3-5 of Dong do include "connectors 54" that extend horizontally to define multiple vertical "levels", these connectors 54 do not themselves contain the hierarchical data and hence do not represent multiple vertically oriented levels of a tree diagram as the term "level" is defined and used in the present application. Moreover, while Figs. 3-5 of Dong include what Dong refers to as a "horizontal scale", this "horizontal scale" refers to the distance that the connectors 54 travel in a horizontal direction. As such, Dong clearly does not disclose or suggest including horizontally oriented levels in a tree diagram (i.e., horizontally oriented group of nodes that each contain data from the set of hierarchical data that are physically offset from other horizontally oriented levels). In fact, the description of Dong does not state that Dong includes multiple vertically or horizontally oriented levels, but instead refers to a "vertical scale" and a "horizontal scale" that are used to graphically depict relationships between a single column of vertically aligned data. As such, the rejection of Claim 1 as anticipated by Dong should be withdrawn for at least each of these reasons.

II. The Rejection of Claim 2

Claim 2 depends from Claim 1, and hence the rejection of Claim 2 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 1 should be withdrawn. In addition, Applicants respectfully submit that Claim 2 is independently patentable over Dong. In particular, the Office Action states that Col. 2, lines 9-23 of Dong discloses "at least one element in the set of hierarchical data includes a set of embedded hierarchical data" as recited in Claim 2. However, what the cited portion of Dong discusses is providing a hierarchical tree in which "cluster analysis" is used to represent relationships between different items. There is no mention or disclosure of including embedded hierarchical data in any items in the tree diagram, and Figs. 3-5 and the discussion thereof make clear that none of the entries in the "hierarchical trees" of Dong do not include embedded hierarchical data. Accordingly, the rejection of Claim 2 should be withdrawn for this additional reason.

III. The Rejection of Claim 3

Claim 3 depends from both Claims 1 and 2, and hence the rejection of Claim 3 should be withdrawn for each of the reasons, discussed above, that the rejections of Claims 1 and 2 should be withdrawn. In addition, Applicants respectfully submit that Claim 3 is independently patentable over Dong. In particular, Claim 3 recites that "the set of embedded hierarchical data is displayed in the second portion of the tree diagram." The Office Action states that Col. 5, lines 1-24 of Dong discloses this recitation. However, what the cited portion of Dong actually discusses is "threshold indicators" which are vertical lines that are included in the "hierarchical tree" of Dong for purposes of grouping items given different constraint values. Accordingly, Dong also fails to disclose the recitation added by Claim 3, and hence the rejection of Claim 3 should be withdrawn for this additional reason.

IV. The Rejection of Claim 4

Claim 4 depends from Claims 1-3, and hence the rejection of Claim 4 should be withdrawn for each of the reasons, discussed above, that the rejections of Claim 1-3 should be withdrawn. In addition, Applicants respectfully submit that Claim 4 is independently patentable over Dong. In particular, the Office Action states that Col. 5, lines 25-26 of Dong discloses "at least one element in the set of embedded hierarchical data includes a second set of embedded hierarchical data" and that "the second set of embedded hierarchical data is displayed in a third portion of the tree diagram" as recited in Claim 4. However, all that the cited portion of Dong states is that "[l]ower threshold indicator 56 is utilized to identify sub-groups of elements from the groups of elements illustrated at reference numeral 64, 66, 68, 70 and 72." (Dong at Col. 5, lines 25-27). This statement provides no teaching or disclosure of including an element in a set of hierarchical data that includes embedded hierarchical data and that at least one element in the embedded hierarchical data includes a second set of embedded hierarchical data (i.e., two levels of embedding hierarchical data in a tree diagram). As such, the rejection of Claim 4 should be withdrawn for this additional reason.

V. The Rejection of Claim 5

Claim 5 depends from Claim 1, and hence the rejection of Claim 5 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 1 should be withdrawn. In addition, Applicants respectfully submit that Claim 5 is independently patentable over Dong. In particular, the Office Action states that Col. 6, lines 35-54 of Dong discloses that "the second portion of the tree diagram is disposed between two adjacent levels of the plurality of vertically oriented levels" as recited in Claim 5. However, what the cited portion of Dong actually discusses is the spacing along the vertical axis that is provided in the "hierarchical trees" of Dong. As is readily apparent from Figs. 3-5 of Dong, Dong clearly does not disclose or suggest placing a portion of the tree diagram that includes a plurality of horizontally oriented levels between two adjacent levels of a plurality of vertically oriented levels. Thus, Dong's failure to disclose the recitations added by Claim 5 provides an independent basis for withdrawal of the rejection of Claim 5.

VI. The Rejection of Claim 6

Claim 6 depends from Claim 1, and hence the rejection of Claim 6 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 1 should be withdrawn. In addition, Applicants respectfully submit that Claim 6 is independently patentable over Dong. In particular, the Office Action states that Col. 6, lines 55-67 of Dong discloses "at least one of the plurality of horizontally oriented levels has a first node that is aligned with one of the plurality of vertically oriented levels and a second node that is aligned with a different one of the plurality of vertically oriented levels" as recited in Claim 6. However, what the cited portion of Dong discusses is the applicability of the system of Dong to the viewing web page hierarchies, and includes no teaching or suggestion of including a horizontally oriented level that has nodes aligned with respective ones of the vertically oriented levels as recited in Claim 6. Accordingly, the rejection of Claim 6 should be withdrawn for this additional reason.

VII. The Rejection of Claim 7

Claim 7 depends from Claim 1, and hence the rejection of Claim 7 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 1 should be withdrawn. In

addition, Applicants respectfully submit that Claim 7 is independently patentable over Dong. In particular, the Office Action states that FIGS. 2-5 of Dong disclose "an expansion handle icon having a first configuration adjacent at least one of the nodes in the first portion of the tree diagram" and "an expansion handle icon having a second configuration adjacent at least one of the other nodes in the first portion of the tree diagram" as recited in Claim 7. Applicants respectfully submit, however, that the cited portions of Dong include no disclosure of expansion handles whatsoever. Thus, as Dong also fails to disclose the subject matter of Claim 7, the rejection of Claim 7 should be withdrawn for this additional reason.

VIII. The Rejection of Claim 8

Claim 8 depends from Claim 1, and hence the rejection of Claim 8 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 1 should be withdrawn. In addition, Applicants respectfully submit that Claim 8 is independently patentable over Dong. In particular, the Office Action states that Col. 7, lines 21-44 of Dong discloses "a plurality of level indicators of a second type that is different from the first type that denote respective of the plurality of horizontally oriented levels" as recited in Claim 8. Applicants respectfully submit, however, that the cited portion of Dong does not disclose anything having to do with a different type of level indicators for horizontally oriented levels. In fact, the cited portion of Dong describes a flowchart. Accordingly, the rejection of Claim 8 should be withdrawn for this additional reason.

IX. The Rejection of Claim 9

Claim 9 depends from Claims 1 and 5, and hence the rejection of Claim 9 should be withdrawn for each of the reasons, discussed above, that the rejections of Claims 1 and 5 should be withdrawn. In addition, Applicants respectfully submit that Claim 9 is independently patentable over Dong. In particular, the Office Action states that Col. 7, lines 44-63 of Dong discloses "expanding a first of the one or more nodes in a first of the plurality of vertically oriented levels to display at least one of the one or more nodes in a first of the plurality of horizontally oriented levels" and "laterally shifting the displayed plurality of vertically oriented levels that are higher levels than the first of the plurality of vertically oriented levels" as recited

in Claim 9. However, what the cited portion of Dong actually discusses is several of the blocks in the aforementioned flowchart that relate to "threshold indicators" and "constraint values" that have nothing to do with the subject matter of Claim 9. Thus, the rejection of Claim 9 should be withdrawn for this additional reason.

X. The Rejection of Claim 10

Claim 10 depends from Claim 1, and hence the rejection of Claim 10 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 1 should be withdrawn.

XI. The Rejection of Claim 11

Claim 11 depends from Claims 1 and 10, and hence the rejection of Claim 11 should be withdrawn for each of the reasons, discussed above, that the rejections of Claim 1 and 10 should be withdrawn. In addition, Applicants respectfully submit that Claim 11 is independently patentable over Dong. In particular, the Office Action states that Figs. 3-4 of Dong discloses "the tree diagram includes a third portion that has a plurality of second vertically oriented levels, and wherein each of the plurality of second vertically oriented levels branch out directly or indirectly from respective ones of a group of nodes that comprise part of the second portion of the tree diagram" as recited in Claim 11. The Office Action does not attempt to explain what comprises the vertically and horizontally oriented levels of Figs. 3-4 of Dong, nor does it attempt to explain how Figs. 3-4 allegedly disclose the other recitations of Claim 11. Applicants respectfully submit that Figs. 3-4 of Dong do not disclose the recitations of Claim 11, and thus Claim 11 is also independently patentable over Dong.

XII. The Rejection of Claim 12

Claim 12 recites:

12. A method for displaying a set of hierarchical data in which elements of the set of hierarchical data include embedded hierarchical data on an electronic display, the method comprising:

displaying at least part of the set of hierarchical data on the electronic display in a first plurality of levels that have a first orientation upon which the one or more nodes that comprise the level are substantially aligned; and

displaying the embedded hierarchical data embedded in at least one of the elements of the set of hierarchical data on the electronic display in a second plurality of levels that have a second orientation upon which the one or more nodes that comprise the level are substantially aligned;

wherein the second orientation is different than the first orientation.

The Office Action states that Figs. 3-4, Col. 6, lines 54-67 15-64 and Col. 7, lines 6-30 of Dong discloses the method of Claim 12. However, as discussed above, Dong discloses displaying all of the hierarchical data in a single, vertically-oriented level and uses connectors 54 -- that are not hierarchical data -- to show the relationships between the hierarchical data. As such, Dong does not disclose (1) the "first plurality of levels", (2) the "second plurality of levels", (3) "elements of the set of hierarchical data include[ing] embedded hierarchical data" or (4) the "second orientation is different than the first orientation" recitations of Claim 12. Accordingly, Applicants respectfully submit that the rejection of Claim 12 as anticipated by Dong should be withdrawn.

XIII. The Rejection of Claim 13

Claim 13 depends from Claim 12, and hence the rejection of Claim 13 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 12 should be withdrawn. In addition, Applicants respectfully submit that Claim 13 is independently patentable over Dong. In particular, the Office Action states that Col. 4, lines 28-58 of Dong discloses that "the first orientation is a vertical orientation and the second orientation is a horizontal orientation" as recited in Claim 13. Applicants respectfully submit, however, that the cited portion of Dong does not disclose displaying a set of hierarchical data in levels having both horizontal and vertical orientations. Accordingly, the rejection of Claim 13 should be withdrawn for this additional reason.

XIV. The Rejection of Claim 14

Claim 14 depends from Claim 12, and hence the rejection of Claim 14 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 12 should be withdrawn. In addition, Applicants respectfully submit that Claim 14 is independently patentable over Dong. In particular, the Office Action states that Col. 4, lines 8-25 of Dong discloses "displaying a second set of hierarchical data that is embedded in an element of the embedded hierarchical data in one or more of the first plurality of levels" as recited in Claim 14. Again, the cited portion of Dong does not discuss embedded hierarchical data. Accordingly, the rejection of Claim 14 should be withdrawn for this additional reason.

XV. The Rejection of Claim 15

Claim 15 recites:

15. A graphical user interface for displaying a set of hierarchical data in which elements of the set of hierarchical data include embedded hierarchical data, comprising:

a tree diagram having a plurality of vertically oriented levels that include one or more nodes;

a plurality of horizontally oriented levels that include one or more nodes, wherein each of the plurality of horizontally oriented levels branch out directly or indirectly from respective of the one or more nodes in the plurality of vertically oriented levels.

The Office Action states that Col. 5, lines 5-56 and Figs. 3-5 of Dong disclose the graphical user interface of Claim 15. However, neither Figs. 3-5 nor the cited passage from Col. 5 of Dong discloses a tree diagram having both a plurality of vertically oriented levels and a plurality of horizontally oriented levels. Accordingly, Dong fails to anticipate Claim 15 for at least this reason.

XVI. The Rejection of Claim 16

Claim 16 depends from Claim 15, and hence the rejection of Claim 16 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 15 should be withdrawn. In addition, Applicants respectfully submit that Claim 16 is independently patentable over Dong. In particular, the Office Action states that Col. 6, lines 6-54 of Dong discloses the recitations of Claim 16. However, Applicants respectfully submit that the cited

portion of Dong does not disclose providing different types of expansion handles for horizontally oriented versus vertically oriented levels. Accordingly, the rejection of Claim 16 should be withdrawn for this additional reason.

XVII. The Rejection of Claim 17

Claim 17 depends from Claim 15, and hence the rejection of Claim 17 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 15 should be withdrawn. In addition, Applicants respectfully submit that Claim 17 is independently patentable over Dong. In particular, the Office Action states that Figs. 2-5 of Dong discloses the subject matter of Claim 17. However, Applicants respectfully submit that the cited portion of Dong does not disclose providing different types of level indicators for horizontally oriented versus vertically oriented levels. Accordingly, the rejection of Claim 17 should be withdrawn for this additional reason.

XVIII. The Rejection of Claim 18

Claim 18 depends from Claim 17, and hence the rejection of Claim 18 should be withdrawn for each of the reasons, discussed above, that the rejections of Claim 15 and 17 should be withdrawn.

XIX. The Rejection of Claim 19

Claim 19 depends from Claim 15, and hence the rejection of Claim 19 should be withdrawn for each of the reasons, discussed above, that the rejection of Claim 15 should be withdrawn. In addition, Applicants respectfully submit that Claim 19 is independently patentable over Dong. In particular, the Office Action states that Col. 5, lines 57-67 of Dong discloses the recitations of Claim 19. However, Applicants respectfully submit that the cited portion of Dong does not disclose disposing each of the plurality of horizontally oriented levels between pairs of adjacent nodes in the plurality of vertically oriented levels as recited in Claim 19, providing an independent basis for withdrawal of the rejection of Claim 19.

XX. The Rejection of Claims 20-24

Claims 20-24 also stand rejected as anticipated by Dong. Applicants respectfully submit, however, that the rejection of Claim 20 should be withdrawn for reasons substantially similar to the reasons that the rejection of Claim 6 should be withdrawn, that the rejection of Claim 22 should be withdrawn for reasons substantially similar to the reasons that the rejection of Claim 16 should be withdrawn, and that the rejection of Claim 24 should be withdrawn for reasons substantially similar to the reasons that the rejection of Claim 13 should be withdrawn. The rejections of Claims 21 and 23 should be withdrawn at least because these claims depend from a patentable base claim.

Accordingly, for the above-stated reasons, Applicants respectfully request that this application is in condition to pass to issue, which action is respectfully requested. Should the Examiner have any matters of outstanding resolution, he is encouraged to telephone the undersigned at 919-854-1400 for expeditious handling.

Respectfully submitted,



D. Randal Ayers
Registration No. 40,493

Customer No. 20792
Myers Bigel Sibley & Sajovec
P. O. Box 37428
Raleigh, North Carolina 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401